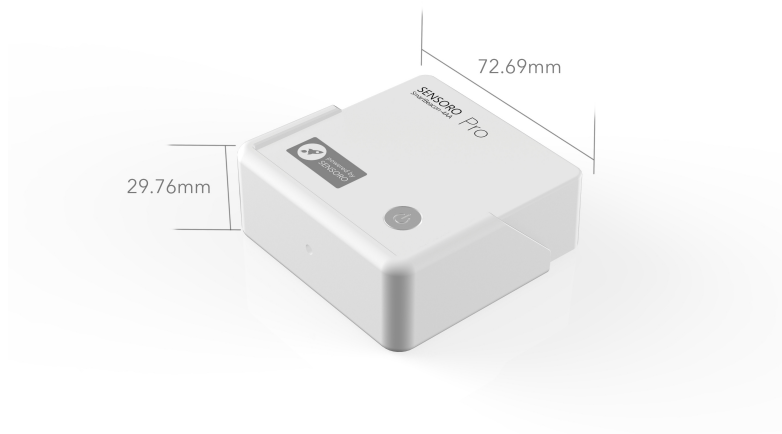


Sensoro SmartBeacon-4AA Pro

Overview

The SmartBeacon-4AA Pro is built for commercial deployment and is specially suited to outdoor situations because its protection against various environmental conditions.



Ingress Protection Criterion

SmartBeacon-4AA Pro achieves a professional-grade waterproof and dustproof rating of IP67. The IP67 rating guarantees total protection from dust and from submersion in between 15cm to 1m of water despite featuring an external power button and screwless design.



IP is an abbreviation of International Protection Marking, sometimes called Ingress Protection. The IP rating for electrical equipment enclosure classifies and rates the degree of protection against intrusion by dust, accidental contact, and water. The rating classification is published by the International Electrotechnical Commission (IEC) standard IEC 60529, the standard adopted in 2004 by the American National Standards Institute. The IP rating format for enclosure and protection of electrical equipment is IPXX, where XX is the two digits, the first digit representing the contact protection level against external particles, and the second digit representing the waterproofing protection level.

SmartBeacon-4AA Pro's rating of IP67 guarantees no ingress of dust, complete protection against contact, and protection while submerged in up to 1 meter of water.

Features

1. Ultra-Low Power Consumption

Uses a Bluetooth® 4.0 (Bluetooth® low energy) Nordic NFR51822 chip with ultra-low power consumption.

Bluetooth low energy with intelligent energy-saving programs allows the beacon to work for three to five years on four number 5 AA batteries.

2. Compatibility

Software and firmware are fully compatible with Apple's iBeacon and Google's Eddystone technical requirements, and can be applied to systems including:

iOS 7.0 or above:

iPhone 4S, iPhone 5, iPhone 5S, iPad 3, iPad mini, iPad air.

Android 4.3 or above:

Samsung Galaxy S III, Galaxy S IV, Galaxy Note II, Galaxy Note III and Motorola RAZR, HTC ONE, etc.

3. Demo App and Configuration App

The "Yunzi" (demo) app allows you to experience our beacons, while the "Sensoro" app (configuration tools) puts you in control of all of their features.

Scan the QR code to download:



Signal Stability and Data Transmission

1. Transmission Stability and Distance

To achieve signal stability and long-distance data transmission requirements, the SmartBeacon-4AA Pro underwent extensive testing and modification. Its signal remains stable even in complex deployment locations. Radius frequency (RF) power demand configuration can be adjusted to a maximum radius of 80 meters, which covers area of 2,826 square meters. The RF power demand configuration can reduce its radius to a minimum of 0.15 meters, which covers an area of 0.225 square meters. However, it is possible that no signal will be obtained if the RF power is adjusted to a minimum.

2. Enterprise Class Device Management Support

Mass management of device status is an essential component of our enterprise class cloud software solutions. Our patented beacon devices can be deployed to collect bulk data, and using the Sensoro cloud, your organization has the essential tools needed to seamlessly manage large-scale deployments. Centralized management on your phone or computer is made easy by enterprise class software solutions.

Specifications

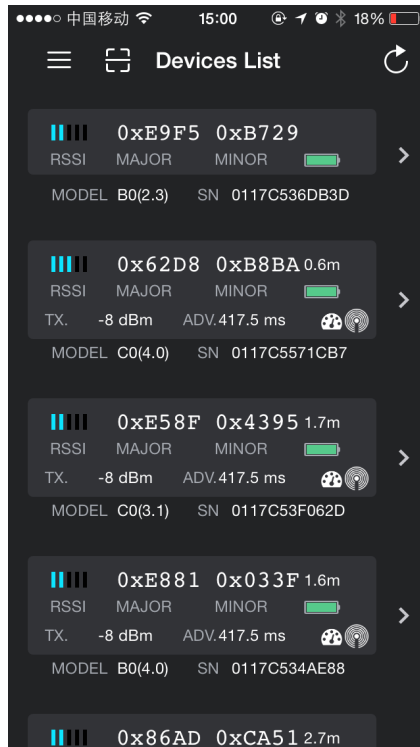
Property	Specifications
Chip	Nordic
External Dimensions	72.69mm x 70.00mm x 29.76mm (Including wall mount kit)
Weight	92g
Exterior Materials	Polycarbonate
Resistances	Water resistant / dust proof / anti-vibration through IP67 certification
Protocol Standards	Bluetooth® 4.0 low energy, supports iBeacon and Eddystone
End User Compatibility	iOS 7.0 or above / Android 4.3 or above
Software Upgrades	Support for over-the-air firmware upgrades
Security	Hardware-level password access
Sensors	Temperature / Light / Acceleration
LED	1 LED light bulb
Radius Power	-30dBm to +4dBm (can be adjusted to optimize signal strength)
Transmission Range	0.15 ~ 80m
Radio Frequency (Transmission Broadcast Interval)	Adjustable (100 milliseconds ~ 1.285 seconds)

Property	Specifications
Power Consumption per Broadcast	7.58 * 10 ⁻⁶ mAh (-8dBm transmitting power)
Sleep Mode Power Consumption	15uW
Sleep Mode Current	5uA
Supply Voltage	3.0V
Battery	Four AA batteries (not included)
Operational Life	2-5 years

Sensoro App's Configuration Tools

The Sensoro app is available for developers to check on and configure the parameters of all nearby Sensoro beacons. The Sensoro app is compatible with iOS 7.0 or above (iPhone 4S, iPhone 5, iPhone 5S, iPad 3, iPad mini, iPad air) and Android 4.3 or above (Samsung Galaxy S III, Galaxy S IV, Galaxy Note II, Galaxy Note III and Motorola RAZR, HTC ONE, etc.). Using the Sensoro app, you can deploy beacons one at a time, and then view all nearby beacons if you want to make changes. If you would like to deploy and configure beacons in bulk, please use the Deploy app.

Open the Sensoro app, and the Device List of all nearby beacons will appear. The information for each beacon includes Major, Minor, as well as other basic information including an animated display of the RSSI strength.

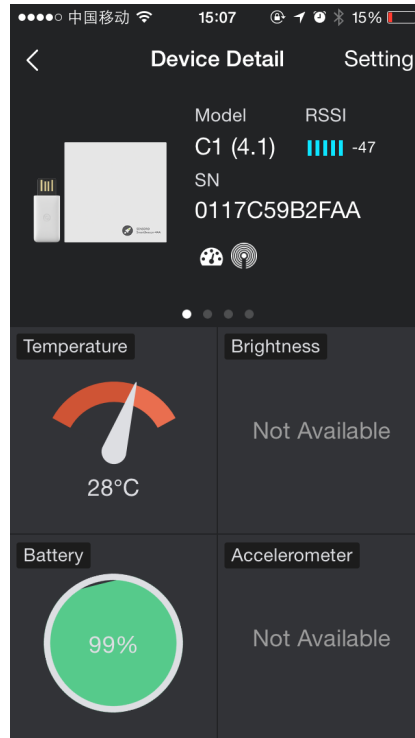


All nearby Sensoro beacons will be listed by order of when the app detected their presence. By changing the Major, Minor values, we can differentiate beacons. Since Major, Minor consists of two values, we recommend grouping associated beacons using the Major value, and labeling individual beacons using the Minor value. For example, beacons at a museum might all have the 00FF code for Major, and each individual beacon placed at different locations throughout the museum would have a unique Minor code. If you would like to view the tags of all devices in range, please log into the Sensoro Cloud on the Inspection app.

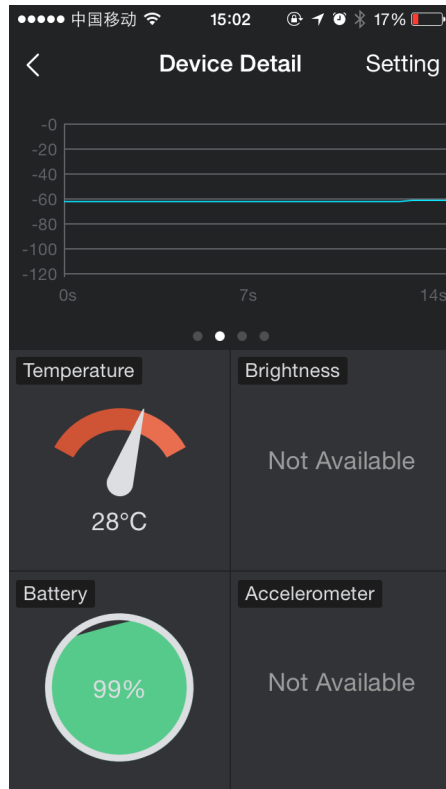
The Device Detail page displays the real-time details of each of the beacon's sensors, battery life, and RSSI signal. Touch the device box on the Device List to enter the Device Detail page.

You can also locate an individual beacon on the Device List by scanning the device's QR code. Touch the scanning icon on the

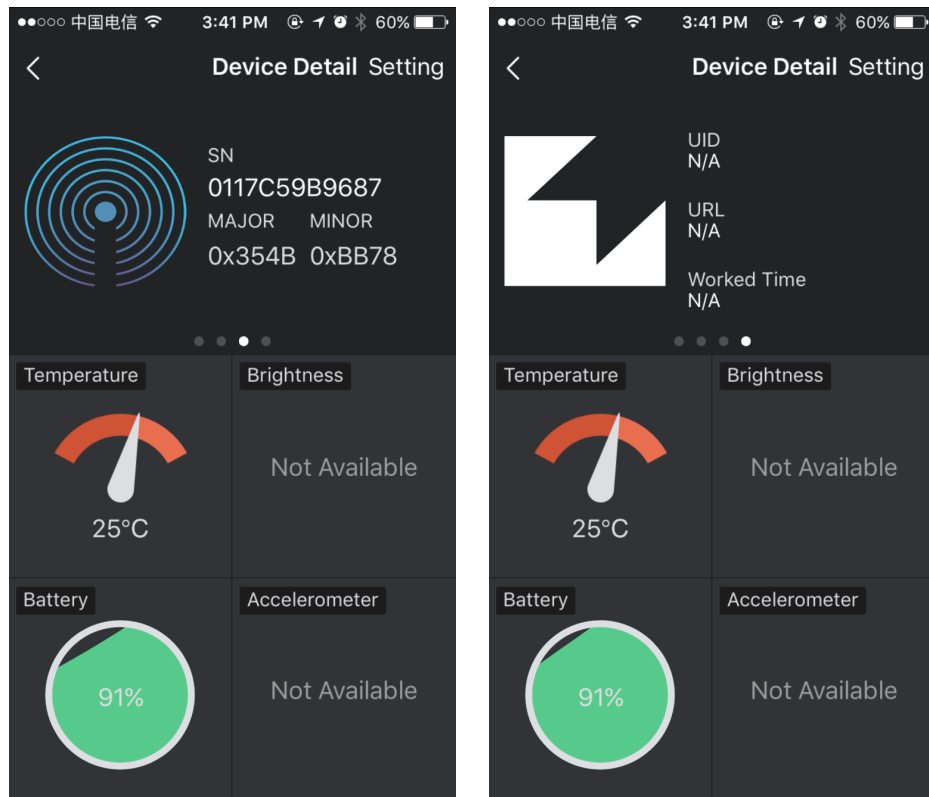
top right of the device list. Once the device is scanned, it will take you to the Device Detail page.



Swipe left on the top of the Device Detail page to bring up the real-time RSSI line display graph. This more detailed RSSI graph allows developers to accurately understand the signal changes in the device, as show below.



Swipe left again to view whether the device being viewed is using iBeacon or Eddystone protocol.



The Sensoro app not only allows developers to set up beacon UUID, Major and Minor basic information, but also modify device emission power, radio frequency power, and operating parameters.

Cancel	Settings	Save	Cancel	Settings	Save	Cancel	Settings	Save
iBeacon			TLM Interval	One per One >		Key	Disabled >	
iBeacon	Enabled >		Broadcast			Prevent Tampering		
UUID	23A01AF0-232A-4518-9... >		Transmit Power	Level 8 >		Password	>	
Major	0xD40F >		Advertising Interval	417.5 ms >		Sensor		
Minor	0xA0EB >		mRssi Calibration	-75 >		Temp. Sampling Interval	1s >	
Eddystone			Enhance Broadcast	Disabled >		Others		
UID	Disabled >		AliBeacon	Disabled >		Shake to Light on	Disabled >	
URL	Disabled >		Prevent Squatters			Reset All Settings		
TLM	Disabled >		Key	Disabled >		Scan QRcode to configure		
NID	5DC33487F02E477D4058 >		Prevent Tampering			Export configure to QRcode		
BID	0117C59B2FAA >		Password	>		Flash Beacon		
URL	http://www.sensoro.com/ >		Sensor					

Security

The device is made secure by a hardware level password, used also by the US military, which prevents unauthorized modification of SmartBeacon-4AA Pro parameters. SmartBeacon-4AA Pro allows you to enjoy rich functionality and stability without security concerns.

Quality Assurance

Having passed FCC (FCC certification number: 2ADYO-C0), CE, and MIC certification, each device has rigorously undergone factory defect, spectrum, power, and stability testing.



Note:

Product Name: SmartBeacon

Model No: 4AA Pro

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